

Retrospective pain ratings: How to create or avoid bias?

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Background and aims

- Retrospective symptom ratings, commonly used in clinical practice and research, are frequently overestimated and susceptible to emotional and cognitive biases.
- Attentional focus can modulate symptom perception, encoding, and memory.

Aim of this pilot study: The effect of interoceptive focus (IF) on sensory-perceptual vs. affective responses during encoding on biased symptom reports. Distraction by external stimuli served as control condition.

Sensory focus → focus on sensory-perceptual aspects of sensations

Affective focus → focus on feelings about sensations and emotional distress

Hypothesis:

Affective IF will lead to increased symptom ratings and affective responses to stimuli compared to sensory IF.

Methods

Participants:

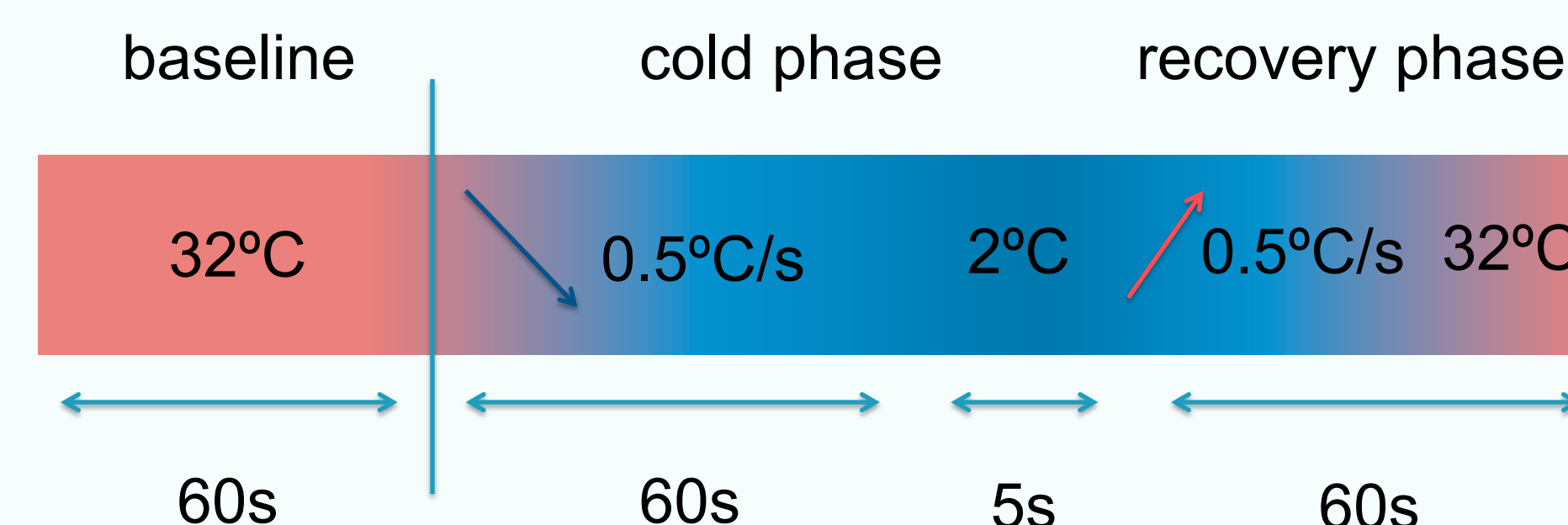
47 healthy students (12 male/35 female)

Procedure:

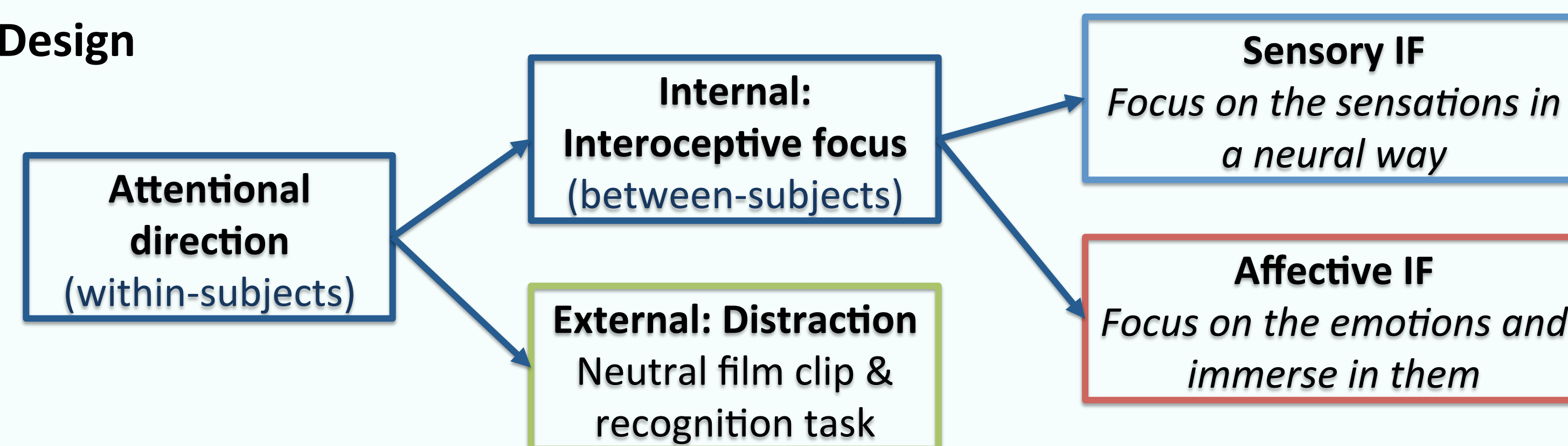
Two pain induction trials

3x3 cm thermode (Medoc Pathway)

Ventral surface of dominant forearm

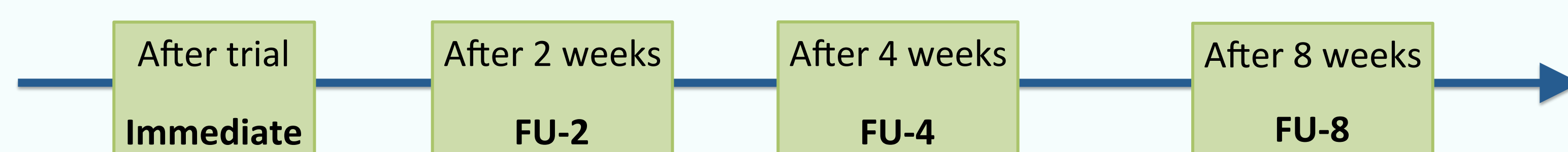


Design



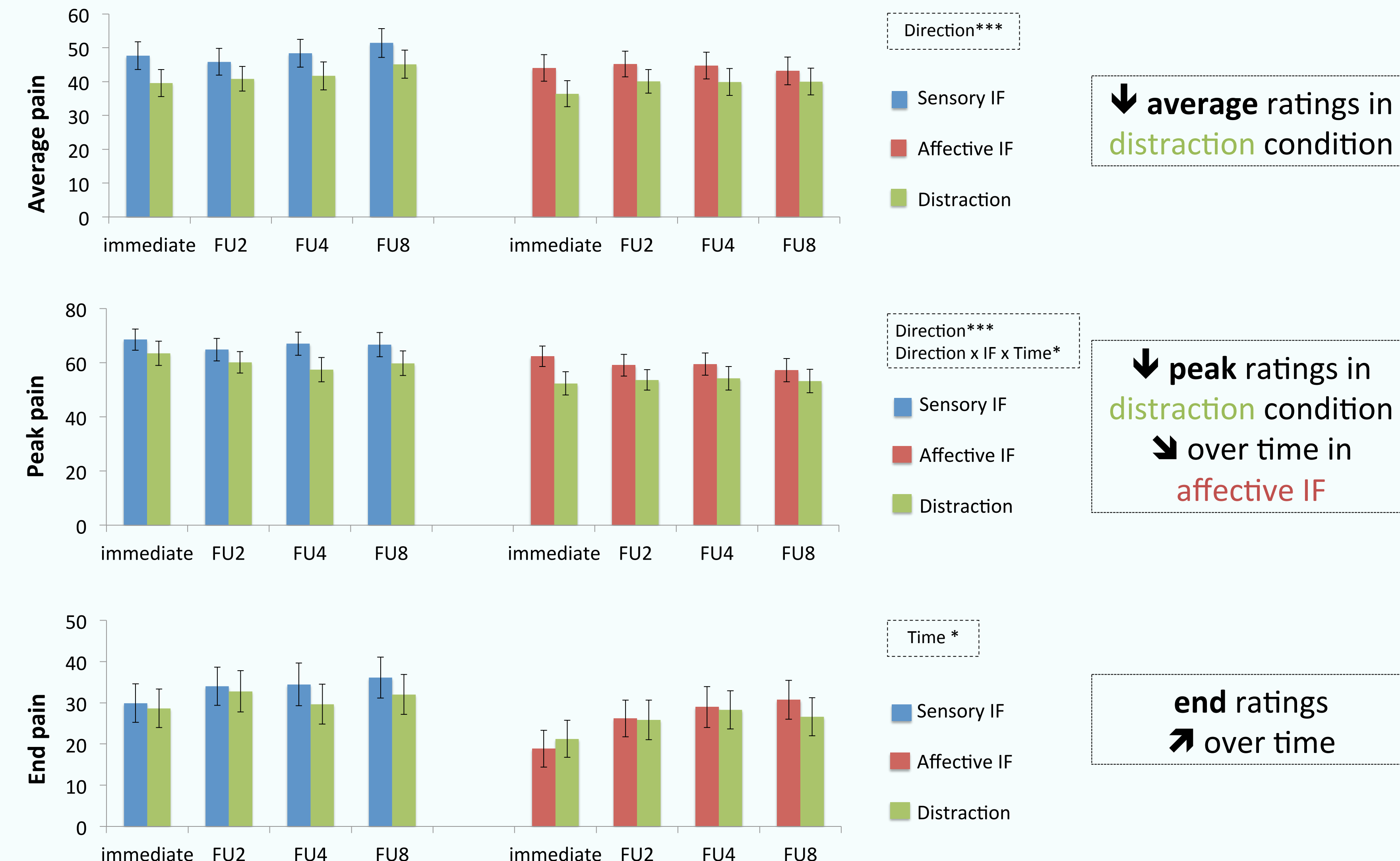
Self-report measures:

- Pain ratings (0-100 visual analogue scale) on four measurement moments



- State negative affect (NA), state anxiety: baseline/after each trial
- Trait: Fear of Pain (FPQ-III)

Results

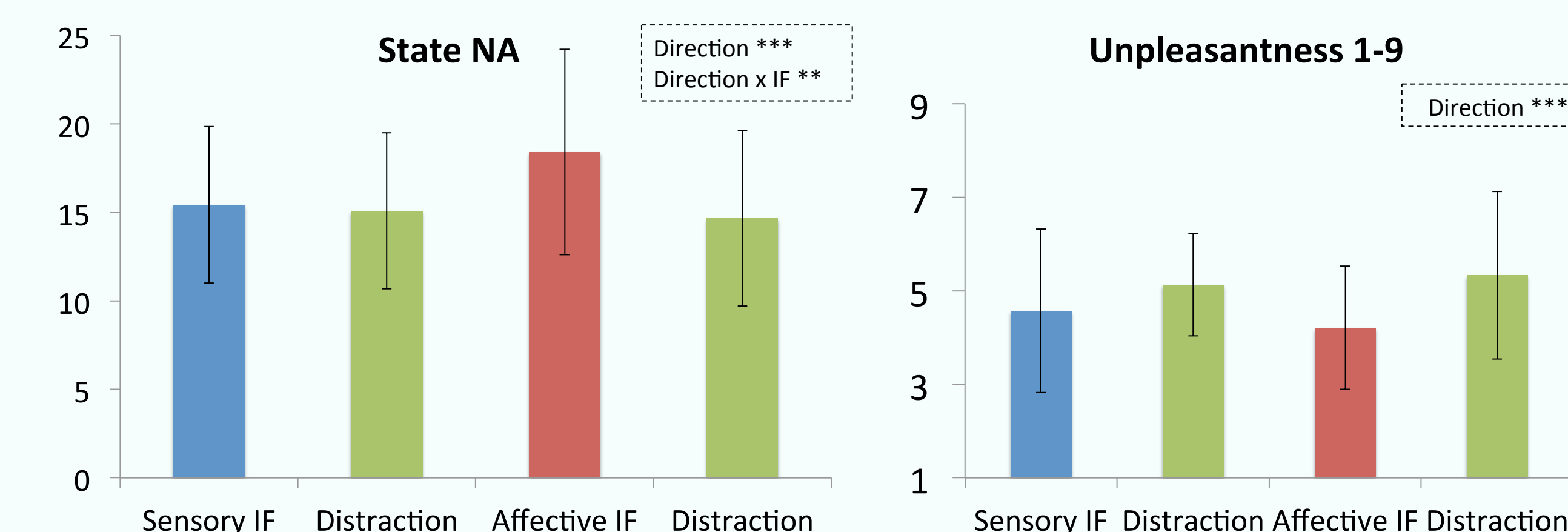


Including **Fear of Pain (FPQ)** as a covariate:

↑ FPQ ↑ average & end ratings, but no effect on peak ratings

Affective responses

- Lower state NA and unpleasantness in distraction condition
- Affective IF – highest state NA



Conclusions

- ◆ Symptom and unpleasantness ratings: no difference between two IF conditions:
 - Localized and specific pain did not evoke strong negative emotions → focus on mildly negative affective responses could serve as a distraction from pain
 - More aversive symptom induction needed to examine the effects of attentional focus
- ◆ Distraction was related to lower emotional distress and average/peak pain ratings
- ◆ Fear of pain modulated ambiguous pain experience (when painful sensations were ambiguous or low), but had less influence during more intense pain experiences (peak)

